

REMARKS

The Amendments

Claim 1 is amended to incorporate the substance of claim 2 therein and also to recite the presence of at least one compound of the formula IIIb or IIIg. The latter amendment is supported by the disclosure by the list bridging pages 12-13 and by the mixture examples A to D at pages 29-30. Each of the exemplified mixtures contains a compound of formula IIIb and/or IIIg. The IIIb compounds fall under the ECCP-nF.F designation and the formula IIIg compounds fall under the BCH-nF.F designation. This also provides support for new claim 20. The indication in the Advisory Action that the Reply of February 6, 2004, mismatched the indication IIIe with the wrong formula is corrected by this amendment. The formula was correct but should have been indicated as IIIb. The other claims are amended to conform therewith and to make a non-substantive clarification. Further dependent claims supported by the disclosure at page 15, lines 23-29, and page 17, lines 1-2, are added.

To the extent that the amendments avoid the prior art or for other reasons related to patentability, competitors are warned that the amendments are not intended to and do not limit the scope of equivalents which may be asserted on subject matter outside the literal scope of any patented claims but not anticipated or rendered obvious by the prior art or otherwise unpatentable to applicants. Applicants reserve the right to file one or more continuing and/or divisional applications directed to any subject matter disclosed in the application which has been canceled by any of the above amendments.

The Rejection under 35 U.S.C. § 102 over WO 96/05159

The rejection of claims 1-16 under 35 U.S.C. § 102, as being anticipated by WO 96/05159 (US 6,159,393) is respectfully traversed.

Reference herein will be made to the U.S. Patent since it corresponds to the WO and is in the English-language. It would appear that the U.S. Patent is also prior art under 35 U.S.C. § 102(e) but would not be applicable under 35 U.S.C. § 103 due to 35 U.S.C. § 103(c).

Claim 1 now recites an additional required component of formula IIIb or IIIg and recites the property values from previous claim 10. The reference does not provide a specific disclosure (as required for anticipation) which meets all elements of the claim. The Office Action points to a list of mixture examples which allegedly meet all the claimed components. With the additional recited component IIIe or IIIg, many of these examples no longer meet this element of the claims. The examples which do still meet all components do not meet the property recitations of the instant claims. For example, mixture examples M29 and M33 of the reference meet all the currently recited components of claim 1 but these mixtures exhibit a low clearing point, i.e., each of 65°C. Thus, these mixtures do not meet the claim recitation of “nematic phase at least down to -20°C and at least above 75°C.” The Office Action points out that the reference suggests its mixtures have a nematic phase range of at least 90°C, preferably 100°C. But this does not necessitate that the nematic phase is at least above 75°C. The recitation of the reference relates to the breadth of the range not the absolute temperature values of the minimum and maximum points. For example, a nematic range of -35°C to +65°C has a range of 100°C, meeting the reference suggestion, but does not meet the claim recitation that the maximum of the nematic range (also called the clearing point) is at least above +75°C. Additionally, the reference does not disclose rotational viscosity values for its mixtures. The statement on col. 17, lines 57-60, does not relate to “rotational viscosity.” This relates to kinematic viscosity, akin to flow viscosity. It would be evident to one of ordinary skill in the art that, if the disclosure just says viscosity, without indicating a particular type, it is reciting kinematic or flow viscosity since this is the typically encountered

viscosity term. Since the reference does not specify rotational viscosity, it is not referring to this value. The statement in the reference regarding kinematic viscosity does not suggest that the reference mixtures meet the rotational viscosity values recited in instant claim 1.

The Advisory Action of March 10, 2004, states that the “liquid crystal properties of US ‘393 are within the claimed range. Because the liquid crystal mixtures of the reference are similar and comprising the present medium, the liquid crystal properties, such as rotational viscosity will be inherently anticipated by the reference.” Applicants respectfully disagree. While the reference may generically encompass the types of components recited in instant claim 1, it does not disclose providing them in a mixture – e.g., by picking particular components and amount and additional components – such that the properties recited in instant claim 1 are met. It should be clear on the record that merely picking components meeting the formulae recited in the claim will not necessarily result in a composition meeting the properties recited in claim 1. For example, as pointed out above, the examples M29 and M33 of the reference do not meet the clearing point recitation of instant claim 1.

“Inherency” in the patent law is legally defined as a phenomena which necessarily and inevitably occurs, as opposed to a phenomena which might occur, from a given set of conditions. Ex Parte Cyba, 155 USPQ 756 (Bd. App. 1966); and In re Oelrich, 212 USPQ 323, 326 (CCPA 1981). The reference itself proves that its compositions do not inherently meet the property recitations of claim 1 because its own examples show that its compositions do not meet the clearing point recitation. Regarding the rotational viscosity, there is no basis to assert that the reference compositions would inherently – i.e., necessarily and inevitably – meet the range recited in instant claim 1. To the contrary, given the breadth of the reference disclosure, it almost certainly encompasses many compositions not having such rotational viscosity property. Thus, it cannot be said to necessarily and inevitably meet the rotational viscosity recitation.

For the above reasons, it is urged that the reference fails to meet all elements of the instant claims and, therefore, the anticipation rejection under 35 U.S.C. § 102 should be withdrawn.

The Rejection under 35 U.S.C. § 102 over US 6,045,878

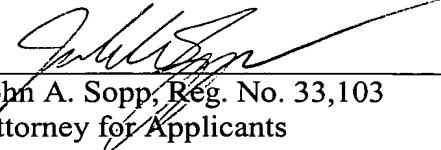
The rejection of claims 1-8, 11-13 and 15-16 under 35 U.S.C. § 102, as being anticipated by U.S. Patent No. 6,045,878 ("Tarumi"), is respectfully traversed.

Previous claim 10 was not subject to this rejection. The subject matter of that claim is now incorporated into the sole independent claim 1. The reference fails to disclose a composition meeting all elements of instant claim 1. Thus, the rejection should be withdrawn.

It is submitted that the claims are in condition for allowance. However, the Examiner is kindly invited to contact the undersigned to discuss any unresolved matters.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,


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